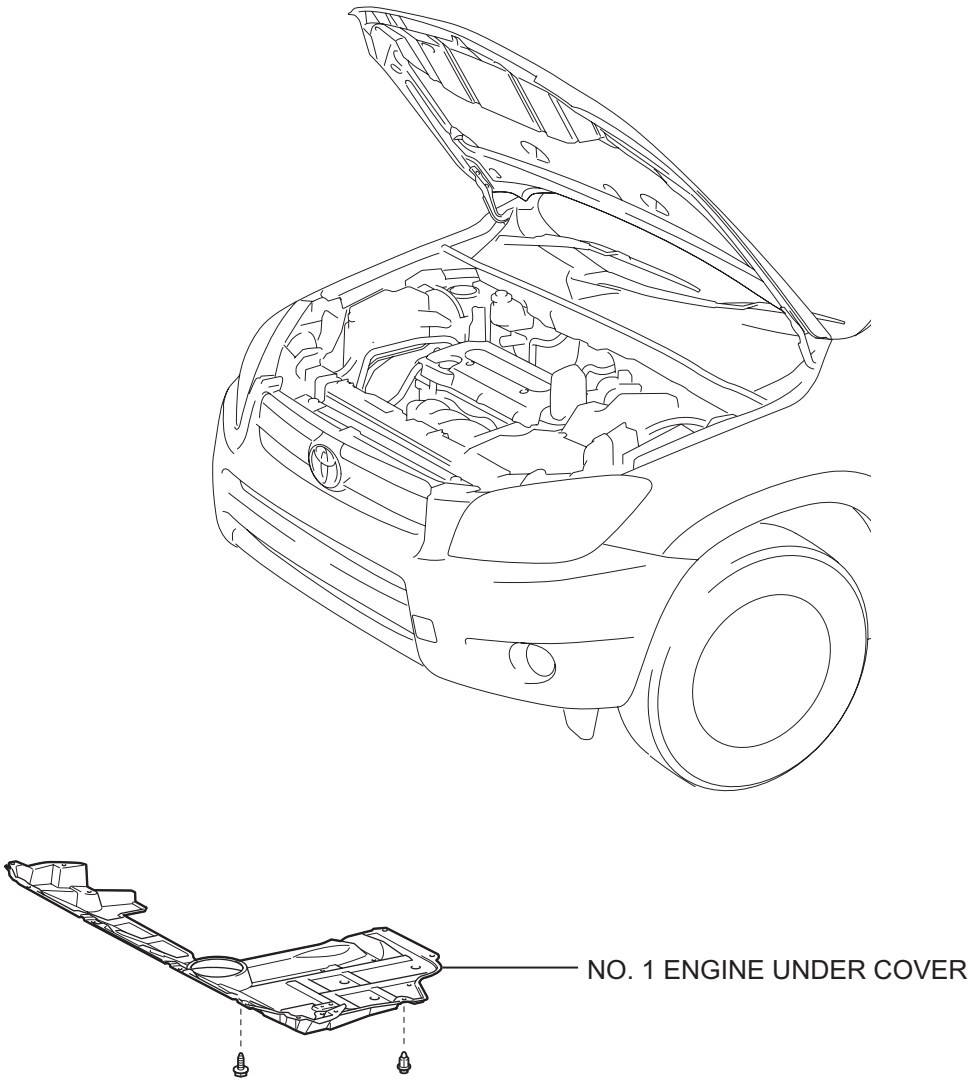


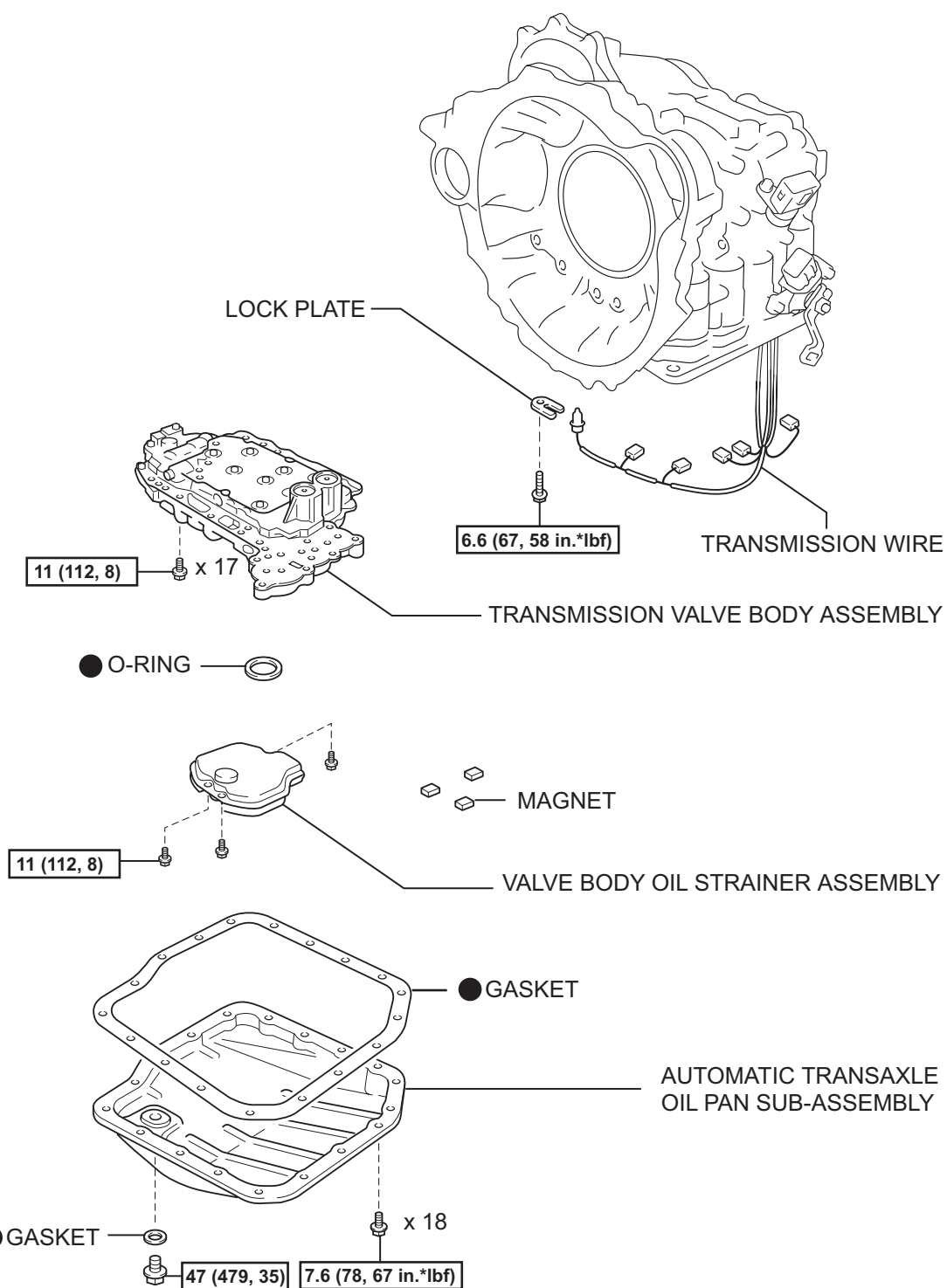
VALVE BODY ASSEMBLY

COMPONENTS

AX



AX



N*m (kgf*cm, ft.*lbf) : Specified torque

● Non-reusable part

AX

REMOVAL

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. **REMOVE NO. 1 ENGINE UNDER COVER**

3. **DRAIN AUTOMATIC TRANSAXLE FLUID**

- (a) Remove the drain plug and gasket, and drain ATF.
- (b) Install a new gasket and the drain plug.

Torque: 47 N*m (479 kgf*cm, 35 ft.*lbf)

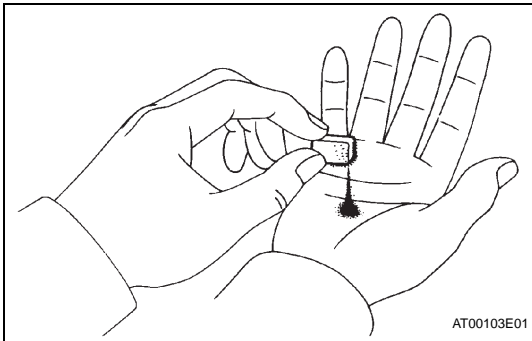
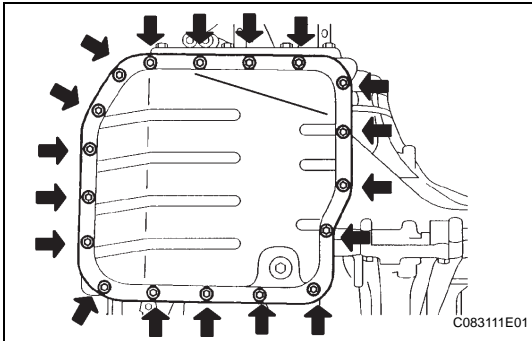
4. **REMOVE AUTOMATIC TRANSAXLE OIL PAN SUB-ASSEMBLY**

- (a) Remove the 18 bolts, oil pan and gasket.

NOTICE:

Some fluid will remain in the oil pan. Carefully remove the oil pan sub-assembly.

- (b) Remove the 3 magnets from the oil pan.



- (c) Examine particles in the pan.

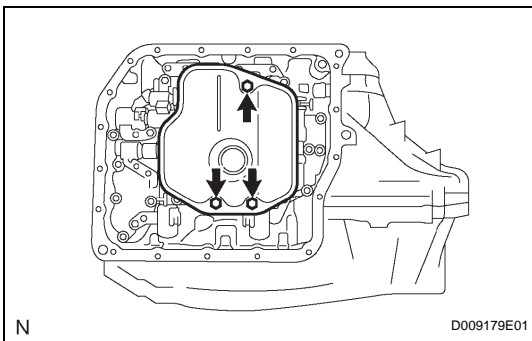
- (1) Use the removed magnets to collect any steel chips. Look carefully at the chips and particles in the pan and on the magnet to anticipate what type of wear you will find in the transaxle.
Steel (magnetic): bearing, gear and plate wear
Brass (non-magnetic): bush wear

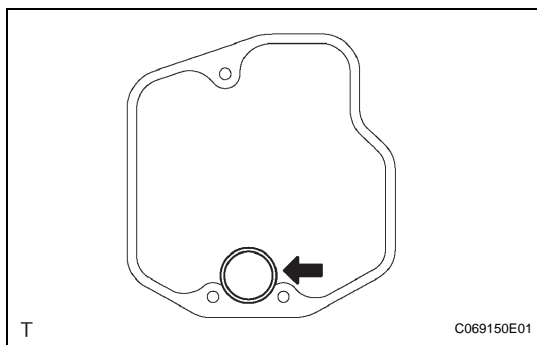
5. **REMOVE VALVE BODY OIL STRAINER ASSEMBLY**

- (a) Remove the 3 bolts and oil strainer.

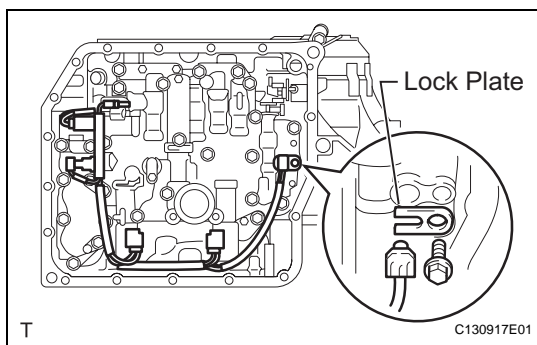
NOTICE:

Be careful as some fluid will come out with the oil strainer.



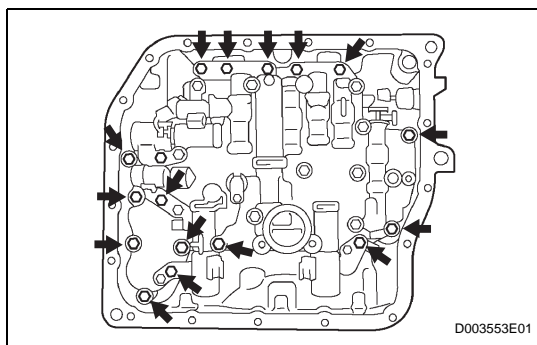


(b) Remove the O-ring from the oil strainer.



6. DISCONNECT TRANSMISSION WIRE

- Disconnect the 5 connectors.
- Remove the bolt and lock plate, and remove the ATF temperature sensor.

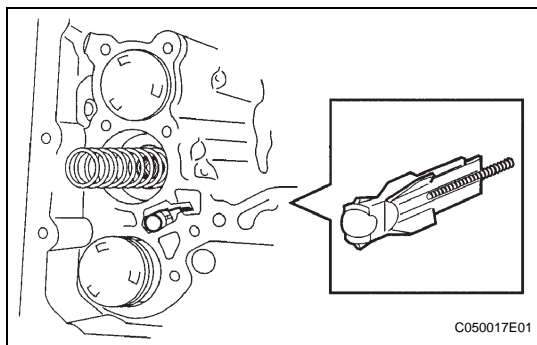


7. REMOVE TRANSMISSION VALVE BODY ASSEMBLY

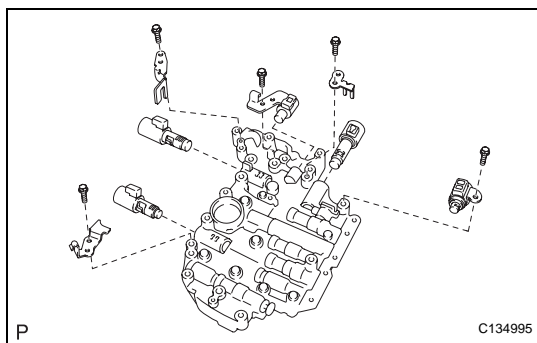
- Support the valve body and remove the 17 bolts and valve body.

NOTICE:

Be careful not to drop the check valve body, spring and accumulator piston.

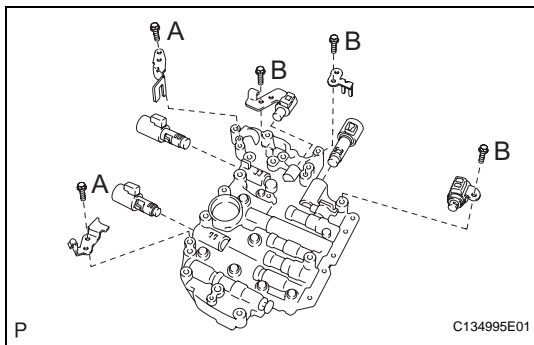


(b) Remove the check ball body and spring.



(c) Remove the 5 bolts, 4 plates and 5 shift solenoid valves.

AX



INSTALLATION

1. INSTALL TRANSMISSION VALVE BODY ASSEMBLY

- (a) Install the 5 shift solenoid valves with the 5 bolts and 4 plates.

Torque: 6.6 N*m (67 kgf*cm, 58 in.*lbf) for bolt A
11 N*m (112 kgf*cm, 8 ft.*lbf) for bolt B

HINT:

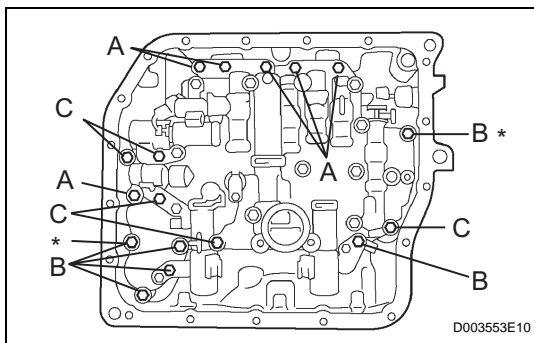
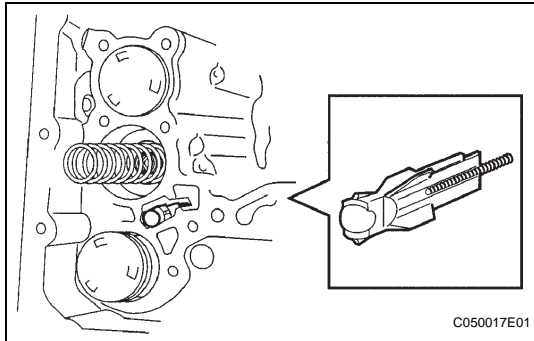
Each bolt length is indicated below.

Bolt length:

12 mm (0.47 in.) for Bolt A

45 mm (1.77 in.) for Bolt B

- (b) Install the spring and check ball body.



- (c) Align the groove of the manual valve with the pin of lever.

- (d) Install the 17 bolts.

Torque: 11 N*m (112 kgf*cm, 8 ft.*lbf)

NOTICE:

- Push the valve body against the accumulator piston spring and the check ball body to install it.
- Tighten the bolts marked by * in the illustration first temporarily because they are positioning bolts.

HINT:

Each bolt length is indicated below.

Bolt length:

25 mm (0.984 in.) for Bolt A

41 mm (1.614 in.) for Bolt B

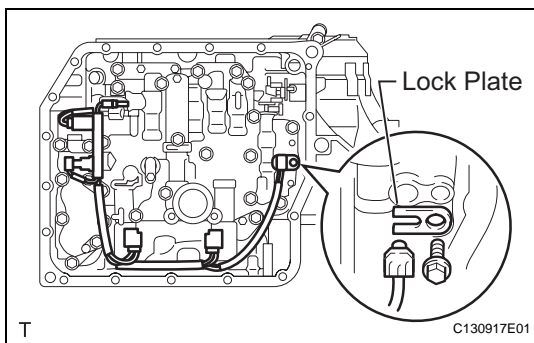
45 mm (1.771 in.) for Bolt C

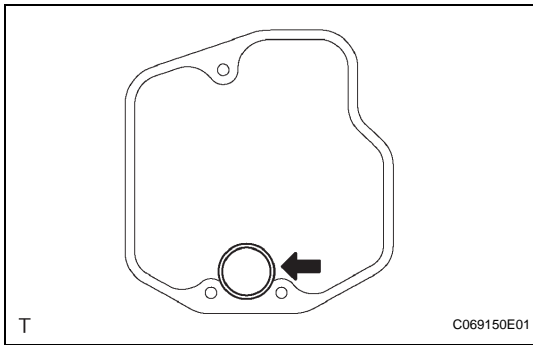
2. INSTALL TRANSMISSION WIRE

- (a) Coat the O-ring with ATF.
- (b) Install the ATF temperature sensor with the lock plate and bolt.

Torque: 6.6 N*m (67 kgf*cm, 58 in.*lbf)

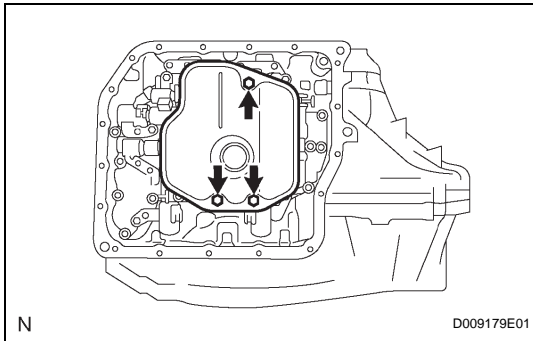
- (c) Connect the 5 shift solenoid valve connectors.



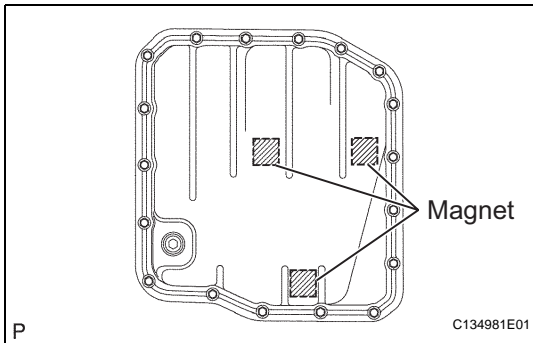


3. INSTALL VALVE BODY OIL STRAINER ASSEMBLY

- (a) Coat a new O-ring with ATF.
- (b) Install the O-ring to the oil strainer.

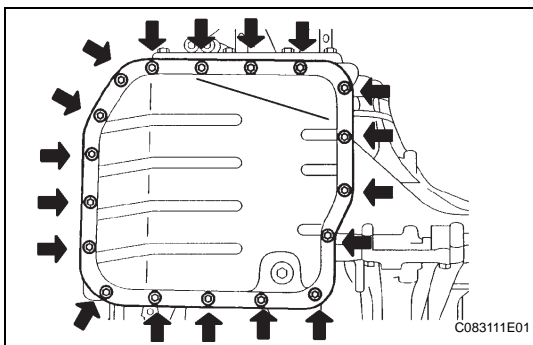


- (c) Install the oil strainer with the 3 bolts.
Torque: 11 N*m (112 kgf*cm, 8 ft.*lbf)



4. INSTALL AUTOMATIC TRANSAXLE OIL PAN SUB-ASSEMBLY

- (a) Install the 3 magnets in the oil pan.



- (b) Install a new gasket, oil pan with the 18 bolts.
Torque: 7.6 N*m (77 kgf*cm, 67 in.*lbf)

5. INSTALL NO. 1 ENGINE UNDER COVER

6. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

7. ADD AUTOMATIC TRANSAXLE FLUID

Fluid type:

Toyota Genuine ATF WS

8. INSPECT TRANSAXLE FLUID LEVEL

- (a) Inspect the fluid level (see page [AX-102](#)).

9. PERFORM RESET MEMORY

- (a) Perform the RESET MEMORY procedures (A/T initialization) (see page [AX-18](#)).